UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,537	02/29/2000	Mika Valkonen	P/1805-15	1026

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EXAMINER
WONG, ALLEN C

ART UNIT	PAPER NUMBER
2613	16

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 February 2004_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-19_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-19_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _13_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/13/04

has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-2 and 19 have been fully read and

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rudt (5,717,456) and Katz (5,956,081) in view of Hunt (EP 0 366 235 A1).

        Regarding claims 1-2, Rudt discloses the method for synchronizing image data

from images of a moving paper web obtained from a plurality of cameras, the method

comprising:

placing each of the plurality of cameras in a position to take a respective image

different from the images taken by the others of the plurality of cameras, and taking

images using at least some of the plurality of cameras (fig.1, note there are numerous

cameras 10 to obtain images and col.5, ln.18-24);

storing image data from the images taken from each of the at least some of the

plurality of cameras in at least one digital image processor (fig.1, note there are

numerous image storage units 18 that correspond for cameras 10 and col.6, ln.44-48);

selecting at least some images of an area of the web and taken from a first of the

at least some of the plurality of cameras and corresponding to respective image data for

display and analysis on an operator's computer screen (fig.1, element 26 is a display

means; also col.6, ln.60-64, Rudt discloses that the display means is capable of

displaying data to the satisfaction of the operator, thus Rudt suggests that selection of

different camera positions on display is feasible since the intent is to satisfy the

operator);

searching the image data for images taken from at least a second of the at least

some of the plurality of cameras and depicting the same area in a corresponding paper

web using synchronization means (col.7, ln.52-64; Rudt discloses the control means 20

is the synchronization means because it can coordinate the clips and scan or search all

the stored images depicting the deviation event or the same area in the web),

displaying a selection area on the operator's computer screen representing fewer

than all images from one of the at least some of the plurality of cameras, wherein the

number of images represented by the selection area is provided by the synchronization

means when an image displayed on the screen and originating from one camera changes to another image originating from another camera (see fig.1, note the connection 24 between the synchronization means 20 and the display means 26, where the operator can visualize the images; and also in col. 6, ln.60-64, Rudt discloses that the display means is capable of displaying data to the satisfaction of the operator, thus Rudt suggests that displaying images from the different camera positions in different sizes can be done to satisfy the operator's viewing and analytical purposes; col.5, ln.8-12, Rudt discloses the image displayed is dependent on hole or discontinuity of the paper web and the distance of cameras to determine deviations or discontinuities).

Rudt does not specifically disclose displaying a selection area on the operator's computer screen that represents images in the sequence of images, the interface further comprising a selection control to select an image in the sequence of images. However, Katz teaches the use of the user interface comprising a selection area that represents images in the sequence of images, the interface further comprising a selection control to select an image in the sequence of images (see fig.2 and col.col.3, ln.59-62, Katz discloses that all related views can be selected by operator for viewing on a computer screen, where in fig.2A, the operator can choose up to 16 different views on one screen if desired, as disclosed in col.4, ln. 23-26; also col.4, ln.3-15, Katz also discloses that the operator can select the view(s) with the use of a computer via mouse or keyboard, and if desired, a touch screen input on the monitor can be used). Therefore, it would have been obvious to one of ordinary skill in the art to take the teachings of Rudt and Katz as a whole for implementing a user interface so as to allow

the operator the flexibility and convenience of operating a display system with ease

when viewing images from an event. Doing so would enhance the synchronization of

the image data obtained by the plural cameras and provide a safe, robust, less costly

display system.

Although Rudt and Katz does not specifically disclose defining at least one

parameter, wherein the at least one parameter represents at least one of the velocity of

the paper web and the distance between the cameras. However, Hunt teaches the

defining at least one parameter, wherein the at least one parameter represents at least

one of the velocity of the paper web and the distance between the cameras (col.5,

ln.33-37 and element 32 of fig.1 and fig.2A, a tachometer is used to monitor the speed

or velocity of a moving web or article and that element 8 processes the data taken from

the tachometer and element 9 does some quality control analysis). Therefore, it would

have been obvious to one of ordinary skill in the art to take Rudt, Katz and Hunt as a

whole for implementing the definition of a velocity characteristic during the monitoring of

a web for quality control purposes and other applications such as stop action

photography, low light photography, photographic archivial recording, intermittent

condition monitoring, and video security (col.1, ln.10-17).

Regarding claims 3 and 6, Rudt discloses the monitoring of the paper web (col.5,

ln.8-24).

Regarding claims 4, 5 and 7-16, Rudt discloses that the image data of the

camera position with the highest-level variation is selected for display (col.6, ln.53-57;

Rudt discloses that the image data with the highest-level variation or deviation is displayed).

Regarding claims 17-18, Rudt discloses the use of a computer (col.6, ln.59-62; a computer must have input means like a keyboard or mouse). Rudt does not specifically disclose the use of a pointer, enabling the operator to select at least one of the images. However, Katz teaches the use of a pointer, enabling the operator to select at least one of the images (col.4, ln.10-13; Katz discloses that a mouse, having a pointer to select one of the images, can be used). Therefore, it would have been obvious to one of ordinary skill in the art to take the teachings of Rudt and Katz as a whole for implementing a user interface so as to allow the operator the flexibility and convenience of operating a display system with ease when viewing images from an event.

Regarding claim 19, Rudt discloses a method for displaying a plurality of images of a moving object obtained from a plurality of cameras, the method comprising:

placing each of the plurality of cameras in a position to take a respective image different from the images taken by others of the plurality of cameras, and taking images using at least some of the plurality of cameras (fig.1, note there are numerous cameras 10 and col.5, ln.18-24);

storing image data from the images in digital processors (fig.1, note there are numerous image storage units 18 that correspond for cameras 10 and col.6, ln.44-48);

obtaining variation information from the image data, the variation information representing a variation in a sequence of images from each of at least two of the plurality of cameras (col.7, ln.52-64; Rudt discloses the control means 20 is the

synchronization means because it can coordinate the clips and scan or search all the

stored images, obtained from each of at least two cameras, depicting the deviation, ie.

variation, or the same area in the web);

comparing the variation information from each of the at least two cameras to

determine a first camera of the plurality of cameras that provided the highest degree of

variation in the sequence of images (col.7, ln.52-64; Rudt discloses the control means

20 is the synchronization means because it can coordinate and compare the clips and

scan or search all the stored images, obtained from each of at least two cameras,

depicting the deviation, ie. variation, or the same area in the web);

displaying a single image of the object from the sequence of images received

from the first camera (col. 6, ln.60-64, Rudt discloses that the display means is capable

of displaying data to the satisfaction of the operator, thus Rudt suggests that displaying

images from the different camera positions in different sizes can be done to satisfy the

operator's viewing and analytical purposes);

synchronizing the image information representing images received from at least

two other cameras to illustrate the object shown in the single image (see fig.1 and col.7,

ln.52-64, note the connection 24 between the synchronization means 20 and the display

means 26, where the operator can visualize the images and that element 20 is also the

synchronization means because it can coordinate the clips and scan or search all the

stored images depicting the deviation event or the same area in the web); and

providing a user interface comprising a selection area that represent fewer than

all images in the sequence of images from one of a plurality of cameras, the interface

further comprising a selection control to select an image in the sequence of images,

wherein the number of images represented by the selection area depends on at least

one of the speed of the moving object and the distance between the cameras, and

wherein images from the at least two cameras are displayed that correspond to the

image selected by the selection control (col. 6, ln.60-64, Rudt discloses that the display

means is capable of displaying data to the satisfaction of the operator, thus Rudt

suggests that displaying images from the different camera positions in different sizes

can be done to satisfy the operator's viewing and analytical purposes; col.5, ln.8-12,

Rudt discloses the image displayed is dependent on the speed of the paper web and

the distance of cameras to determine deviations or discontinuities).

Rudt does not specifically disclose the user interface comprising a selection area

that represents images in the sequence of images, the interface further comprising a

selection control to select an image in the sequence of images. However, Katz teaches

the use of the user interface comprising a selection area that represents images in the

sequence of images, the interface further comprising a selection control to select an

image in the sequence of images (see fig.2 and col.col.3, ln.59-62, Katz discloses that

all related views can be selected by operator for viewing on the operator's computer

screen, where in fig.2A, the operator can choose up to 16 different views on one screen

if desired, as disclosed in col.4, ln. 23-26; also col.4, ln.3-15, Katz also discloses that

the operator can select the view(s) with the use of a computer via mouse or keyboard,

and if desired, a touch screen input on the monitor can be used). Therefore, it would

have been obvious to one of ordinary skill in the art to take the teachings of Rudt and

Katz as a whole for implementing a user interface so as to allow the operator the flexibility and convenience of operating a display system with ease when viewing images from an event. Doing so would enhance the synchronization of the image data obtained by the plural cameras and provide a safe, robust, less costly display system.

Although Rudt and Katz does not specifically disclose defining at least one parameter, wherein the at least one parameter represents at least one of the velocity of the paper web and the distance between the cameras. However, Hunt teaches the defining at least one parameter, wherein the at least one parameter represents at least one of the velocity of the paper web and the distance between the cameras (col.5, ln.33-37 and element 32 of fig.1 and fig.2A, a tachometer is used to monitor the speed or velocity of a moving web or article and that element 8 processes the data taken from the tachometer and element 9 does some quality control analysis). Therefore, it would have been obvious to one of ordinary skill in the art to take Rudt, Katz and Hunt as a whole for implementing the definition of a velocity characteristic during the monitoring of a web for quality control purposes and other applications such as stop action photography, low light photography, photographic archivial recording, intermittent condition monitoring, and video security (col.1, ln.10-17).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Allen Wong
Examiner
Art Unit 2613

AW
3/22/04